Appendix C: Pass Results Format

The Scheduling and Master Teams met on Tuesday, 9/23, to work out the final format of the Pass Results File which will be generated upon takedown after an activity at any WFF tracking station controlled with the Automated Orbital Tracking System. The name of the file will be PRF[Station Designator], where Station Designator is: W for WGS, M for MGS, S for SGS, and A for AGS. As soon as takedown is complete the file is to be generated and sent via FTP to the WISAC component of WOTIS, into the WOTRS mailbox (machine IP address, user name, password, and directory are supplied separately from this memo).

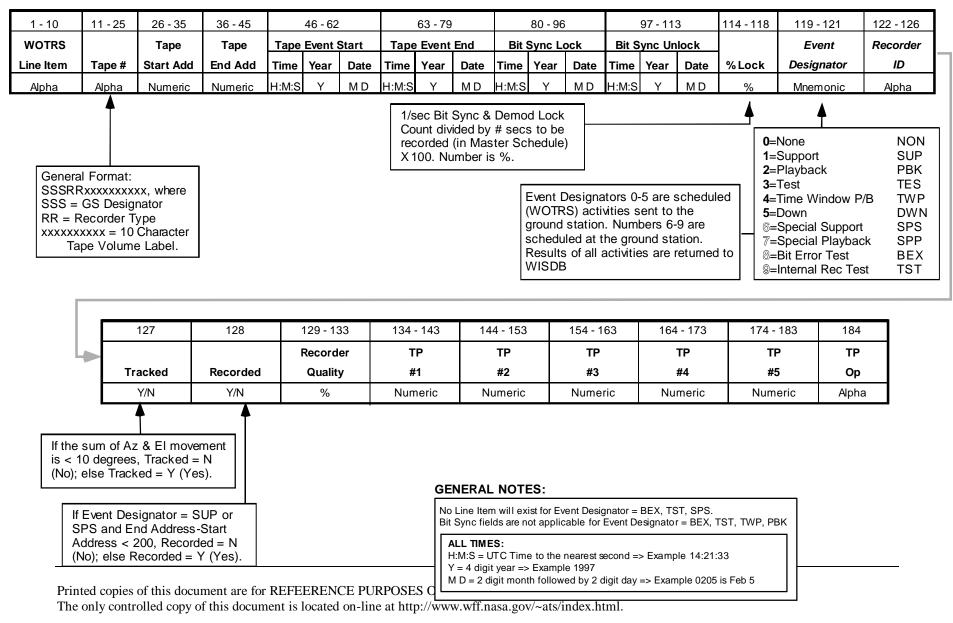The current PRF[ ] file has been changed in the following respects:

1. Five new fields have been added for data quality generated by a Programmable Telemetry Processor (PTP). This should cover both the AVTEC PTP and the ADEOS-II Data Stripper.. The Master may need to summarize the information in the log files from these instruments to provide these parameters.
2. A new field has been added for tape recorder data quality, where provided by a recorder. Again, the Master may need to perform a simple calculation to generate a percent from raw log values.
3. The fields Tracked & Recorded have been transposed.
4. Tracked will be given a value of Y for Yes if the combined movement of the antenna (Azimuth & Elevation) from the beginning to the end of the track exceeds 10 degrees. Otherwise, tracking is assumed to have been unsuccessful, and Tracked = N for No.
5. Recorded will be given a value of Y for Yes if, where the Event Designator is SUP or SPS (indicating a S/C support is being performed), the end address minus the start address for the tape recorder exceeds 200. Otherwise, it will be assumed that the tape did not move enough for recording to be successful, and Recorded will be N for No.

As before, if a field has no value, it should be blank filled with the proper number of blanks (so proper field alignment is always maintained).

Resulting from a better definition of PTP capabilities (reference WOTIS note, "PTP Data Quality Requirements", dated 1/26/98), a sixth single character field has been added to #1 above to define the PTP operation being reported: Command Processing (C), non-CCSDS Telemetry Processing (T), CCSDS Telemetry Processing (R). In addition, the items in #1 have been reordered.

The new format is given below.

PRF[ ] File Format

1 - 10	11 - 25	26 - 35	36 - 45	46 - 62			63 - 79			80 - 96			97 - 113			114 - 118	119 - 121	122 - 126
WOTRS		Tape	Tape	Tape Event Start			Tape Event End			Bit Sync Lock			Bit Sync Unlock				*Event*	*Recorder*
Line Item	Tape #	Start Add	End Add	Time	Year	Date	Time	Year	Date	Time	Year	Date	Time	Year	Date	%Lock	*Designator*	*ID*
Alpha	Alpha	Numeric	Numeric	H:M:S	Y	M D	H:M:S	Y	M D	H:M:S	Y	M D	H:M:S	Y	M D	%	Mnemonic	Alpha

General Format:
SSSRRxxxxxxxxxx, where
SSS = GS Designator
RR = Recorder Type
xxxxxxxxxx = 10 Character Tape Volume Label.

1/sec Bit Sync & Demod Lock Count divided by # secs to be recorded (in Master Schedule) X 100. Number is %.

Event Designators 0-5 are scheduled (WOTRS) activities sent to the ground station. Numbers 6-9 are scheduled at the ground station. Results of all activities are returned to WISDB

0=None — NON
1=Support — SUP
2=Playback — PBK
3=Test — TES
4=Time Window P/B — TWP
5=Down — DWN
⑥=Special Support — SPS
⑦=Special Playback — SPP
⑧=Bit Error Test — BEX
⑨=Internal Rec Test — TST

127	128	129 - 133	134 - 143	144 - 153	154 - 163	164 - 173	174 - 183	184
		Recorder	TP	TP	TP	TP	TP	TP
Tracked	Recorded	Quality	#1	#2	#3	#4	#5	Op
Y/N	Y/N	%	Numeric	Numeric	Numeric	Numeric	Numeric	Alpha

If the sum of Az & El movement is < 10 degrees, Tracked = N (No); else Tracked = Y (Yes).

If Event Designator = SUP or SPS and End Address-Start Address < 200, Recorded = N (No); else Recorded = Y (Yes).

GENERAL NOTES:

No Line Item will exist for Event Designator = BEX, TST, SPS.
Bit Sync fields are not applicable for Event Designator = BEX, TST, TWP, PBK

ALL TIMES:
H:M:S = UTC Time to the nearest second => Example 14:21:33
Y = 4 digit year => Example 1997
M D = 2 digit month followed by 2 digit day => Example 0205 is Feb 5

PRF[ ] File Format (continued)

Telemetry Processor	TP#1	TP#2	TP#3	TP#4	TP#5	TP Op
AVTEC PTP Command	# Frames Xmitted	# Headers received	# Headers accepted	# Data Units sent	# Command echos	PTP Stream ID
AVTEC PTP Telemetry	# Bytes output to file or socket	Total # of frames received	# CRC errors (CCSDS)	# correctable Reed-Soloman frames (CCSDS)	# un-correctable Reed-Soloman frames (CCSDS)	PTP Stream ID
TSI Data Stripper (ADEOS S/C)	Total number of frames processed	Number of corrected frames	Number of uncorrected frames	Back_to_Search count	Bit Error Rate	Downlink Band (X1|X2|X3)